DOCKET NO.: HENK-0034/H4051 **PATENT**

Application No.: 10/030,851

Office Action Dated: September 15, 2003

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-14. (Canceled)

(Currently Amended) A process for treating circulating water in a painting booth 15. wherein the circulating water is comprised of paint particles, said process comprising adding to the circulating water an agent consisting essentially of at least one dispersant selected from the group consisting of:

- nonionic surfactants which are alkoxylates of fatty acids and fatty amines; and a)
- anionic surfactants; b)

in a total dispersant concentration of 0.01 to 2.0% by weight, based on circulating water, subject to the proviso that when an anionic surfactant is present no polyaspartic acid is added to the circulating water.

- (Previously Presented) The process of claim 15 wherein at least one dispersant 16. selected from the group consisting of nonionic surfactants which are alkoxylates of fatty acids and fatty amines, said fatty acids and fatty amines containing fatty alkyl groups of 7 to 36 carbon atoms, is added to the circulating water.
- (Previously Presented) The process of claim 15 wherein at least one dispersant 17. selected from the group consisting of nonionic surfactants which are alkoxylates of fatty acids and fatty amines, said alkoxylates containing 5 to 100 alkylene oxide units, is added to the circulating water.
- (Previously Presented) The process of claim 15 wherein at least one dispersant which 18. is an anionic surfactant selected from the group consisting of soaps, alkyl sulfates, alkyl sulfonates, alkyl benzene sulfonates, alkyl ether sulfates containing alkyl groups having 7 to 44 carbon atoms in said alkyl groups, and sulfonated maleic acid esters is added to the circulating water.

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(Previously Presented) The process of claim 15 comprising an additional step of 19. removing the paint particles from the circulating water by membrane filtration.

- (Previously Presented) A process for treating circulating water in a painting booth 20. wherein the circulating water is comprised of paint particles, said process comprising adding to the circulating water i) at least one dispersant selected from the group consisting of:
- homopolymers and copolymers prepared by polymerization of at least one a) polymerizable monomer selected from acrylic acid or methacrylic acid, said homopolymers and copolymers having molecular weights of from 2,500 to 500,000;
 - **b**) nonionic surfactants;
 - c) inorganic complexing agents; and
 - nonpolymeric organic complexing agents; and d)
- ii) 0.2 to 2% by weight, based on circulating water, of polyaspartic acid.
- 21. (Previously Presented) The process of claim 20 comprising an additional step of removing the paint particles from the circulating water by membrane filtration.
- (Previously Presented) The process of claim 20 wherein at least one dispersant 22. selected from the group consisting of homopolymers and copolymers prepared by polymerization of at least one polymerizable monomer selected from acrylic acid or methacrylic acid, said homopolymers and copolymers having molecular weights of from 15,000 to 250,000, is added to the circulating water.
- (Currently Amended) A process for treating circulating water in a painting booth 23. wherein the circulating water is comprised of paint particles and has a hardness of at least 2° German hardness, said process comprising adding to the circulating water an agent consisting essentially of at least one dispersant in a total dispersant concentration of 0.01 to 2.0% by weight, based on circulating water, so as to achieve a mean particle size for the paint particles of less than 20 μm, as determined by laser diffraction.

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24. (Previously Presented) The process of claim 23, wherein at least one dispersant is selected from the group consisting of:

- a) homopolymers and copolymers prepared by polymerization of at least one polymerizable monomer selected from acrylic acid or methacrylic acid, said homopolymers and copolymers having molecular weights of from 2,500 to 500,000;
 - b) nonionic surfactants:
 - c) inorganic complexing agents; and
 - d) nonpolymeric organic complexing agents.
- 25. (Previously Presented) The process of claim 23 wherein at least one dispersant is a nonionic surfactant selected from the group consisting of alkoxylates of fatty acids, alkoxylates of fatty alcohols and alkoxylates of fatty amines, wherein the nonionic surfactant contains a fatty alkyl group having 7 to 36 carbon atoms and 5 to 100 alkylene oxide units.
- 26. (Previously Presented) The process of claim 23 wherein at least one dispersant is an inorganic complexing agent selected from the group consisting of oligomeric and polymeric inorganic phosphates.
- 27. (Previously Presented) The process of claim 23 wherein at least one dispersant is a nonpolymeric organic complexing agent selected from the group consisting of organic carboxylic acids containing two to ten hetero atoms capable of co-ordination to metal ions and organic phosphonic acids.
- 28. (Previously Presented) The process of claim 23 wherein at least one dispersant is selected from the group consisting of citric acid, tartaric acid, malic acid, gluconic acid, nitriloacetic acid, ethylenediamine tetraacetic acid, methylglycine diacetic acid, 1-hydroxyethane-1, 1 -diphosphonic acid, aminotrimethylene phosphonic acid, phosphonobutane tricarboxylic acid, Na triphosphate, Na pyrophosphate and Na hexametaphosphate.

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29. (Previously Presented) The process of claim 23 wherein 0.2 to 2% by weight, based on the circulating water, of polyaspartic acid is additionally added to the circulating water.

- 30. (Previously Presented) The process of claim 23 wherein at least one dispersant is an anionic surfactant and no polyaspartic acid is added to the circulating water.
- 31. (Previously Presented) The process of claim 30 wherein the anionic surfactant is selected from the group consisting of soaps, alkyl sulfates, alkyl sulfonates, alkyl benzene sulfonates, alkyl ether sulfates containing alkyl groups having 7 to 44 carbon atoms, and sulfonated maleic acid esters.
- 32. (Previously Presented) The process of claim 23 comprising an additional step of removing the paint particles from the circulating water by membrane filtration.
- 33. (Withdrawn) A composition comprised of
 - a) water;
 - b) dispersed paint particles;
 - c) polyaspartic acid in acid form, in salt form or in both acid and salt form;
 - d) an alkoxylate of a fatty amine; and
- e) an organic phosphonic acid in acid form, in salt form or in both acid and salt form.
- 34. (Withdrawn) The composition of claim 33 additionally comprising an alkali metal hydroxide.
- 35. (Withdrawn) The composition of claim 33 wherein the organic phosphonic acid is selected from the group consisting 1-hydroxyethane-1, 1-diphosphonic acid, aminotrimethylene phosphonic acid and, phosphonobutane tricarboxylic acid.
- 36. (Withdrawn) The composition of claim 33 wherein said fatty amine is a coconut amine.

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37. (Withdrawn) The composition of claim 33 wherein said alkoxylate of acid fatty amine contains ethylene oxide units.

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- 38. (Withdrawn) The composition of claim 33 wherein d) and e) are present in a concentration totaling from 0.01 to 2.0% by weight.
- 39. (Withdrawn) The composition of claim 33, wherein the polyaspartic acid is present at a concentration of 0.2 to 2% by weight.
- 40. (Withdrawn) The composition of claim 33 wherein said dispersed paint particles have an average particle size of less than 20 μm.
- 41. (Withdrawn) The composition of claim 33 wherein said composition has a weakly alkaline pH.
- 42. (Withdrawn) The composition of claim 33 wherein said composition has a pH of from about 8 to about 10.
- 43. (New) A composition comprising: polyaspartic acid; an alkoxylate of a fatty amine; and an organic phosphonic acid.
- 44. (New) The composition of claim 43 further comprising an alkali metal hydroxide.
- 45. (New) The composition of claim 43 wherein the alkoxylate of a fatty amine contains ethylene oxide units.
- 46. (New) The composition of claim 43 wherein the fatty amine is a coconut amine.

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47. (New) The composition of claim 43 wherein the organic phosphonic acid is 1-hydroxyethane-1, 1-diphosphonic acid, aminotrimethylene phosphonic acid, or phosphonobutane tricarboxylic acid.

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- 48. (New) The composition of claim 43 wherein the alkoxylate of a fatty amine and organic phosphonic acid are present in a concentration of 0.01 to 2.0% by weight.
- 49. (New) The composition of claim 43, wherein the polyaspartic acid is present in a concentration of 0.2 to 2% by weight.
- 50. (New) The composition of claim 43 wherein the composition has a weakly alkaline pH.
- 51. (New) The composition of claim 43 wherein the composition has a pH of from about 8 to about 10.